

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Mixture~~ A mixture for preparing a reactive hot melt adhesive, ~~containing~~ comprising from 10 to 80 per cent by weight of a compound ~~containing~~ comprising at least one free isocyanate ~~groups~~ group and comprising from 20 to 90 per cent by weight of a polymer ~~containing~~ comprising at least one hydroxyl ~~groups~~ group and/or amino ~~groups~~ group and/or mercapto ~~groups~~ group and ~~obtainable~~ obtained by polymerizing ethylenically unsaturated monomers, ~~characterized in that~~ wherein the polymer ~~containing~~ comprising at least one hydroxyl ~~groups~~ group and/or amino ~~groups~~ group and/or mercapto ~~groups~~ group has a polydispersity D of less than 1.9.

Claim 2 (Currently Amended): ~~Mixture~~ The mixture according to Claim 1, ~~characterized in that~~ wherein the polymer ~~containing~~ comprising at least one hydroxyl ~~groups~~ group and/or amino ~~groups~~ group and/or mercapto ~~groups~~ group is ~~obtainable~~ obtained by copolymerizing one or more hydroxy-functionalized and/or amino-functionalized and/or mercapto-functionalized monomers and one or more monomers without hydroxyl and/or amino and/or mercapto functionality of alkyl esters of acrylic or methacrylic acid, vinyl esters, vinyl ethers, fumarates, maleates, styrenes and acrylonitriles.

Claim 3 (Currently Amended): ~~Mixture~~ The mixture according to Claim 1, ~~characterized in that~~ wherein the polymer ~~containing~~ comprising at least one hydroxyl ~~groups~~ group and/or amino ~~groups~~ group and/or mercapto ~~groups~~ group has a glass transition temperature in the range from 15 to 85°C.

Claim 4 (Currently Amended): ~~Mixture~~ The mixture according to Claim 2, ~~characterized in that wherein~~ the polymer ~~containing~~ comprising at least one hydroxyl ~~groups~~ group and/or amino ~~groups~~ group and/or mercapto ~~groups~~ group has a number-average molecular weight of greater than or equal to 5000 g/mol and less than or equal to 100 000 g/mol.

Claim 5 (Currently Amended): ~~Mixture~~ The mixture according to Claim 2, ~~characterized in that wherein~~ the polymer ~~containing~~ comprising at least one hydroxyl ~~groups~~ group and/or amino ~~groups~~ group and/or mercapto ~~groups~~ group has a hydroxyl number of greater than or equal to 4 and less than or equal to 80.

Claim 6 (Currently Amended): ~~Mixture~~ The mixture according to Claim 4, ~~or 5,~~ ~~characterized in that wherein~~ the polymer ~~containing~~ comprising at least one hydroxyl ~~groups~~ group and/or amino ~~groups~~ group and/or mercapto ~~groups~~ group has a hydroxyl number of less than or equal to 40 for a number-average molecular weight of greater than or equal to 5000 g/mol and less than or equal to 25 000 g/mol.

Claim 7 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of Claims 1 to 6~~ Claim 1, ~~characterized in that wherein~~ the polydispersity of the polymer ~~containing~~ comprising at least one hydroxyl ~~groups~~ group and/or amino ~~groups~~ group and/or mercapto ~~groups~~ group is adjusted by fractionation according to the molecular weight.

Claim 8 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of Claims 1 to 6,~~ Claim 1, ~~characterized in that~~ wherein the polymer ~~containing~~ comprising at least one

hydroxyl ~~groups group~~ and/or amino ~~groups group~~ and/or mercapto ~~groups group~~ has been is prepared by a polymerization mechanism which enables a polydispersity D of less than 1.8.

Claim 9 (Currently Amended): ~~Mixture~~ The mixture according to Claim 8, ~~characterized in that wherein the polymer containing comprising at least one hydroxyl groups group and/or amino groups group and/or mercapto groups group has been is~~ obtained by anionic polymerization, RAFT or ATRP.

Claim 10 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the compound ~~containing comprising at least one~~ free isocyanate ~~groups group~~ is a low molecular mass diisocyanate and contains an organic radical with an aromatic.

Claim 11 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the compound ~~containing comprising at least one~~ free isocyanate ~~groups group~~ is ~~obtainable~~ obtained by condensation polymerization of one or more low molecular mass polyisocyanates with one or more polyhydroxy compounds to form a urethane prepolymer.

Claim 12 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the compound ~~containing comprising at least one~~ free isocyanate ~~groups group~~ is ~~obtainable~~ obtained by condensation polymerization of one or more low molecular mass polyisocyanates with one or more polyamino- and/or polymercapto-containing compounds either alone together with one or more polyhydroxy compounds to form a urethane prepolymer.

Claim 13 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of Claims 10 to 12, characterized in that~~ Claim 1, wherein the reactive hot melt adhesive has an isocyanate functionality of greater than 1 and less than or equal to 3.

Claim 14 (Currently Amended): ~~Mixture~~ The mixture according to ~~one of the preceding claims, characterized in that it~~ Claim 1, wherein the mixture further comprises additives such as plasticizers, compatible tackifiers, catalysts, fillers, antioxidants, pigments, stabilizers and thiol/silane-based adhesion promoters.

Claim 15 (Currently Amended): ~~Reactive~~ A reactive hot melt adhesive ~~obtainable obtained~~ by condensation reaction of the polymer ~~containing comprising~~ at least one hydroxyl ~~groups group~~ and/or amino ~~groups group~~ and/or mercapto ~~groups group~~ with the compound ~~containing comprising~~ at least one free isocyanate ~~groups group~~ of a the mixture according to Claim 1 ~~to 14~~.

Claim 16 (Currently Amended): ~~Reactive~~ The reactive hot melt adhesive according to Claim 15, ~~characterized in that it~~ wherein the reactive hot melt adhesive exhibits a viscosity increase of less than 50% after 16 hours at 130°C.

Claim 17 (Currently Amended): ~~Reactive~~ The reactive hot melt adhesive according to Claim 15, ~~characterized in that~~ wherein after curing it the reactive hot melt adhesive contains less than 10 per cent by weight of extractables.

Claim 18 (Currently Amended): ~~Reactive~~ The reactive hot melt adhesive according to Claim 15, ~~characterized in that it~~ wherein the reactive hot melt adhesive has an open time of more than 400 seconds.

Claim 19 (Currently Amended): ~~Reactive~~ The reactive hot melt adhesive according to Claim 15, ~~characterized in that it~~ wherein the reactive hot melt adhesive has a shear strength after curing of more than 10 MPa.

Claim 20 (Currently Amended): ~~Use of the reactive hot melt adhesive of the invention~~ A method for adhesively bonding wood, metal, plastic and glass surfaces or combinations thereof comprising utilizing the reactive hot melt adhesive according to Claim 15 to bond the surfaces.